AMENDMENT TO THE CLAIMS

Please amend the claims as shown below. The listing of the claims below replaces all prior versions of the claims.

1. (Original) A composition comprising:

(a) at least one surfactant having a hydrophobic-lipophilic balance value in the range from about 11 to about 16; and

(b) at least one cell membrane altering compound.

2. (Previously amended) The composition according to claim 1, wherein the surfactant is selected from the group consisting of non-ionic surfactants, cationic surfactants, and mixtures thereof.

3. (Previously amended) The composition according to claim 2, wherein the surfactant is present in the composition in an amount ranging from about 0.001 to about 10% (w/v) of the composition.

4. (Previously amended) The composition according to claim 2, wherein the non-ionic surfactants comprise ethoxylated alkylphenols.

5. (Previously amended) The composition according to claim 4, wherein the ethoxylated akylphenols comprise ethoxylated nonylphenols or octylphenoxypolyethoxyethanol.

6. (Previously amended) The composition according to claim 2, wherein the cationic surfactants comprise ethylene oxide condensates of aliphatic amines or ethoxylated tallow amines.

7. (Previously amended) The composition according to claim 1, wherein the surfactant comprises an ethoxylated amine.

8. (Previously amended) The composition according to claim 1, wherein the surfactant is selected from the group consisting of Tomah E-18-5, Tomah E-18-15, Rhodameen VP 532/SPB, Trymeen 6607, Triton X-100.

9. (Previously amended) The composition according to claim 1, wherein the cell membrane altering compound is present in the composition in an amount effective to substantially lyse or cause pore formation in cell membranes or walls.

10. (Previously amended) The composition according to claim 1, wherein the cell membrane altering compound inhibits phospholipid sensitive Ca +2 dependent protein kinase and attacks cell membranes.

11. (Previously amended) The composition according to claim 1, wherein the cell membrane altering compound alters membrane permeability or disrupts membranes.

12. (Original) The composition according to claim 1, wherein the cell membrane altering compound comprises polymyxin-beta-nonapeptide (PMBN), alkylglycoside or alkylthioglycoside, betaine detergent, quarternary ammonium salt, amine, lysine polymers, magainin, melittin, phospholipase A_2 or phospholipase A_2 activating peptide (PLAP).

13. (Previously amended) The composition according to claim 1, wherein the cell membrane altering compound is an antibiotic.

14. (Previously amended) The composition according to claim 13, wherein the cell membrane altering compound comprises a polymyxin B sulfate or vancomycin.

15. (Previously amended) The composition according to claim 13, wherein the cell membrane altering compound comprises a mixture of polymyxin B1 and polymyxin B2.

16. (Previously amended) The composition according to claim 12, wherein the cell membrane altering compound comprises an alkylglycoside or an alkylthioglycoside.

17. (Original) The composition according to claim 16, wherein the cell membrane altering compound comprises octyl thioglucoside.

18. (Original) The composition according to claim 17, wherein the octyl thioglucoside is present at a final concentration of at least 0.4%, and less than 1% (w/v).

19. (Original) The composition according to claim 18, wherein the octyl thioglucoside is present at a final concentration of between 0.4% and 0.6% (w/v).

20. (Original) The composition according to claim 1, further comprising a buffer salt.

21. (Original) The composition according to claim 20, wherein the buffer salt is present in an amount sufficient to maintain a pH range from about 6.5 to about 9.0.

22. (Original) The composition according to claim 1, further comprising a defoaming agent.

23. (Original) The composition according to claim 1, further comprising an agent to reduce non-specific binding of non-affinity labeled proteins.

24. (Original) The composition according to claim 1, further comprising a lysozyme.

25. (Original) The composition according to claim 1, wherein the composition is in a form of an aqueous solution.

26. (Original) The composition according to claim 25, wherein the solution is a concentrate.

27. (Original) The composition according to claim 23, further comprising a buffer salt in an amount sufficient to maintain a pH range from about 6.5 to about 9.0.

28. (Previously amended) The composition according to claim 27, comprising Tomah E-18-15, Triton X100, and octyl beta thioglucopyranoside.

29. (Previously amended) The composition according to claim 1, comprising 2% Tomah E-18-15, 2% Triton X100, and 6% octyl beta thioglucopyranoside in 500 mM HEPES (pH 7.5).

Claims 30-66. (Previously cancelled)

67. (Currently amended) A kit for isolating proteins or peptides comprising ~~the~~ an apparatus ~~of claim 63~~ for extracting and isolating a protein or peptide comprising:

a housing for holding one or more samples having a protein or peptide;

a composition comprising at least one surfactant having a hydrophobic-lipophilic balance value in the range from about 11 to about 16; and at least one cell membrane altering compound; and

a substrate that binds the protein or peptide.

68. (Original) A kit comprising:

at least one surfactant having a hydrophobic-lipophilic balance value in the range from about 11 to about 16;

at least one cell membrane altering compound; and

directions for using the kit.

69. (Previously amended) The kit according to claim 68, wherein the surfactant and cell membrane altering compound are in a composition.

70. (Previously amended) The kit according to claim 69, wherein the composition includes water.

71. (Original) The kit according to claim 70, wherein the aqueous composition is in the form of a concentrate.

72. (Original) The kit according claim 68, further comprising a buffer.

73. (Original) The kit according to claim 68, further comprising lysozyme.

74. (Original) The kit according to claim 68, further comprising one or more washing buffers.

75. (Original) The kit according to claim 68, further comprising one or more elution buffers.

76. (Original) The kit according to claim 68, further comprising a substrate for binding proteins or peptides.

77. (Original) The kit according to claim 76, wherein the substrate comprises a magnetic or non-magnetic chromatographic resin.

78. (Original) The kit according to claim 68, wherein said kit is used for the recovering proteins or peptides from host cells, for detecting for the presence or absence of a target protein or peptide, or for preparing cell extracts.

79. (Original) The kit according to claim 68, further comprising means for detecting or quantifying the amount of protein or peptide present in the sample.

Claims 80-93. (Previously cancelled)

94. (Previously amended) The composition according to claim 93, wherein the surfactant is selected from the group consisting of non-ionic surfactants, cationic surfactants, and mixtures thereof.

95. (Previously amended) The composition according to claim 94, wherein the surfactant is present in the composition in an amount ranging from about 0.001 to about 10% (w/v) of the composition.

96. (Previously amended) The composition according to claim 94, wherein the non-ionic surfactants comprise ethoxylated alkylphenols.

97. (Previously amended) The composition according to claim 96, wherein the ethoxylated akylphenols comprise ethoxylated nonylphenols or octylphenoxypolyethoxyethanol.

98. (Previously amended) The composition according to claim 94, wherein the cationic surfactants comprise ethylene oxide condensates of aliphatic amines or ethoxylated tallow amines.

99. (Previously amended) The composition according to claim 93, wherein the surfactant comprises an ethoxylated amine.

100. (Currently twice amended) The composition according to claim 93, wherein the surfactant is selected from the group consisting of Tomah E-18-5, Tomah E-18-15, Rhodameen VP 532/SPB, Trymeen 6607, and Triton X-100.

101. (Previously amended) The composition according to claim 93, wherein the cell membrane altering compound is present in the composition in an amount effective to substantially lyse or cause pore formation in cell membranes or walls.

102. (Previously amended) The composition according to claim 93, wherein the cell membrane altering compound inhibits phospholipid sensitive Ca +2 dependent protein kinase and attacks cell membranes.

103. (Previously amended) The composition according to claim 93, wherein the cell membrane altering compound alters membrane permeability or disrupts membranes.

Claim 104. (Previously cancelled)

105. (Previously amended) The composition according to claim 93, wherein the cell membrane altering compound is an antibiotic.

106. (Previously amended) The composition according to claim 105, wherein the cell membrane altering compound comprises a polymyxin B sulfate or vancomycin.

107. (Previously amended) The composition according to claim 105, wherein the cell membrane altering compound comprises a mixture of polymyxin B1 and polymyxin B2.

108. (Previously amended) The composition according to claim 104, wherein the cell membrane altering compound comprises an alkylglycoside or an alkylthioglycoside.

109. (Original) The composition according to claim 108, wherein the cell membrane altering compound comprises octyl thioglucoside.

110. (Original) The composition according to claim 109, wherein the octyl thioglucoside is present at a final concentration of at least 0.4%, and less than 1% (w/v).

111. (Original) The composition according to claim 110, wherein the octyl thioglucoside is present at a final concentration of between 0.4% and 0.6% (w/v).

112. (Original) The composition according to claim 93, further comprising a buffer salt.

113. (Original) The composition according to claim 112, wherein the buffer salt is present in an amount sufficient to maintain a pH range from about 6.5 to about 9.0.

114. (Original) The composition according to claim 93, further comprising a defoaming agent.

115. (Original) The composition according to claim 93, further comprising an agent to reduce non-specific binding of non-affinity labeled proteins.

116. (Original) The composition according to claim 93, further comprising a lysozyme.

117. (Original) The composition according to claim 93, wherein the composition is in a form of an aqueous solution.

118. (Original) The composition according to claim 117, wherein the solution is a concentrate.

119. (Original) The composition according to claim 115, further comprising a buffer salt in an amount sufficient to maintain a pH range from about 6.5 to about 9.0.

120. (Previously amended) The composition according to claim 119, comprising Tomah E-18-15, Triton X100, and octyl beta thioglucopyranoside.

121. (Previously amended) The composition according to claim 93, comprising 2% Tomah E-18-15, 2% Triton X100, and 6% octyl beta thioglucopyranoside in 500 mM HEPES (pH 7.5).

122. (New) The kit according to claim 67 wherein the housing comprises a container, a column, or a multi-well plate.

123. (New) The kit according to claim 67 wherein the substrate comprises a chromatographic resin or membrane.

124. (New) The kit according to claim 123 wherein the chromatographic resin is magnetic.